TEST REPORT

Reference No......	:	WTX23X03058248W
FCC ID.....	:	2BBB2S1085-DW
Applicant.....	:	Dongguan E-Max E-commerce Company Limited
Address.....	:	Room107, Building 3,No.37, Mu Lun Chuang Ye Yi Road , Changping Town ,Dongguan,Guangdong
Product Name.....	:	Wooden Speaker
Test Model.....	:	S1085-DW
Standards.....	:	FCC Part 15 Subpart B
Date of Receipt sample.....	:	May 19, 2023
Date of Test.....	:	May 19~22, 2023
Date of Issue.....	:	May 22, 2023
Test Result.....	:	**Pass**

Remarks:
The results shown in this test report refer only to the sample(s) tested, this test report cannot be reproduced, except in full, without prior written permission of the company. The report would be invalid without specific stamp of test institute and the signatures of compiler and approver.

Prepared By:
Waltek Testing Group (Shenzhen) Co., Ltd.
Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road,
Block 70 Bao'an District, Shenzhen, Guangdong, China

Tested by:

Jack Huang

Approved & Authorized By:

Silin Chen

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1. GENERAL INFORMATION

1.1 Product Description for Equipment Under Test (EUT)

Client Information

Applicant:	Dongguan E-Max E-commerce Company Limited
Address of applicant:	Room107, Building 3,No.37, Mu Lun Chuang Ye Yi Road , Changping Town ,Dongguan,Guangdong
Manufacturer:	Dongguan E-Max E-commerce Company Limited
Address of manufacturer:	Room107, Building 3,No.37, Mu Lun Chuang Ye Yi Road , Changping Town ,Dongguan,Guangdong

General Description of EUT	
Product Name:	Wooden Speaker
Trade Name:	Aolyty
Model No.:	S1085-DW
Adding Model(s):	S1085-WB
Serial Number:	S-056
Note: The test data is gathered from a production sample, provided by the manufacturer. The appearance of others models listed in the report is different from main-test model S1085-DW, but the circuit and the electronic construction do not change, declared by the manufacturer.	

Technical Characteristics of EUT	
Rated Voltage:	DC 5V, 500mA
Power Adapter Model:	/
Max. Internal Frequency:	＜108MHz
Classification of ITE:	Class B

1.2 Test Standards

The tests were performed according to following standards:

FCC Rules Part 15 Subpart B: Unintentional Radiators
ANSI C63.4-2014: American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz

Maintenance of compliance is the responsibility of the manufacturer. Any modification of the product, which result in lowering the emission, should be checked to ensure compliance has been maintained.
ed.

1.3 Test Methodology

All measurements contained in this report were conducted with ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

The equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted accordingly in reference to the Operating Instructions.

1.4 Test Facility

Address of the test laboratory
Laboratory: Waltek Testing Group (Shenzhen) Co., Ltd.
Address: 1/F., Room 101, Building 1, Hongwei Industrial Park, Liuxian 2nd Road, Block 70 Bao'an District, Shenzhen, Guangdong, China

FCC – Registration No.: 125990
Waltek Testing Group (Shenzhen) Co., Ltd. EMC Laboratory has been registered and fully described in a report filed with the FCC (Federal Communications Commission). The acceptance letter from the FCC is maintain ed in our files. The Designation Number is CN5010, and Test Firm Registration Number is 125990.

1.5 EUT Setup and Operation Mode

The equipment under test (EUT) was configured to measure its highest possible emission level. The test modes were adapted according to the operation manual for use, more detailed description as follows:

Test Mode List:

Test Mode	Description	Remark
TM1	Working	Playing

EUT Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
/	/	/	/

Auxiliary Equipment List and Details

Description	Manufacturer	Model	Serial Number
Adapter	TSL	TSL-1681	/

Special Cable List and Details

Cable Description	Length (M)	Shielded/Unshielded	With Core/Without Core
USB Line	0.8	Unshielded	Without Core

1.6 Measurement Uncertainty

Conducted Emissions	Conducted	9-150kHz ±3.74dB
		0.15-30MHz ±3.34dB
Radiated Emissions	Radiated	30-200MHz ±4.52dB
		0.2-1GHz ±5.56dB
		1-6GHz ±3.84dB

1.7 Test Equipment List and Details

No.	Description	Manufacturer	Model	Serial No.	Cal Date	Due Date
SEMT-1072	Spectrum Analyzer	Agilent	E4407B	MY41440400	2022-06-04	2023-06-03
SEMT-1031	Spectrum Analyzer	Rohde & Schwarz	FSP30	836079/035	2022-06-04	2023-06-03
SEMT-1007	EMI Test Receiver	Rohde & Schwarz	ESVB	825471/005	2022-06-04	2023-06-03
SEMT-1008	Amplifier	Agilent	8447F	3113A06717	2022-06-04	2023-06-03
SEMT-1043	Amplifier	C&D	PAP-1G18	2002	2022-06-04	2023-06-03
SEMT-1011	Broadband Antenna	Schwarz beck	VULB9163	9163-333	2022-06-04	2023-06-03
SEMT-1042	Horn Antenna	ETS	3117	00086197	2022-06-04	2023-06-03
SEMT-1069	Loop Antenna	Schwarz beck	FMZB 1516	9773	2022-06-04	2023-06-03
SEMT-1001	EMI Test Receiver	Rohde & Schwarz	ESPI	101611	2022-06-04	2023-06-03
SEMT-1003	L.I.S.N	Schwarz beck	NSLK8126	8126-224	2022-06-04	2023-06-03
SEMT-1002	Pulse Limiter	Rohde & Schwarz	ESH3-Z2	100911	2022-06-04	2023-06-03

2. SUMMARY OF TEST RESULTS

FCC Rules	Description of Test Item	Result
§ 15.107 (a)	Conducted Emissions	Compliant
§ 15.109 (a)	Radiated Emissions	Compliant

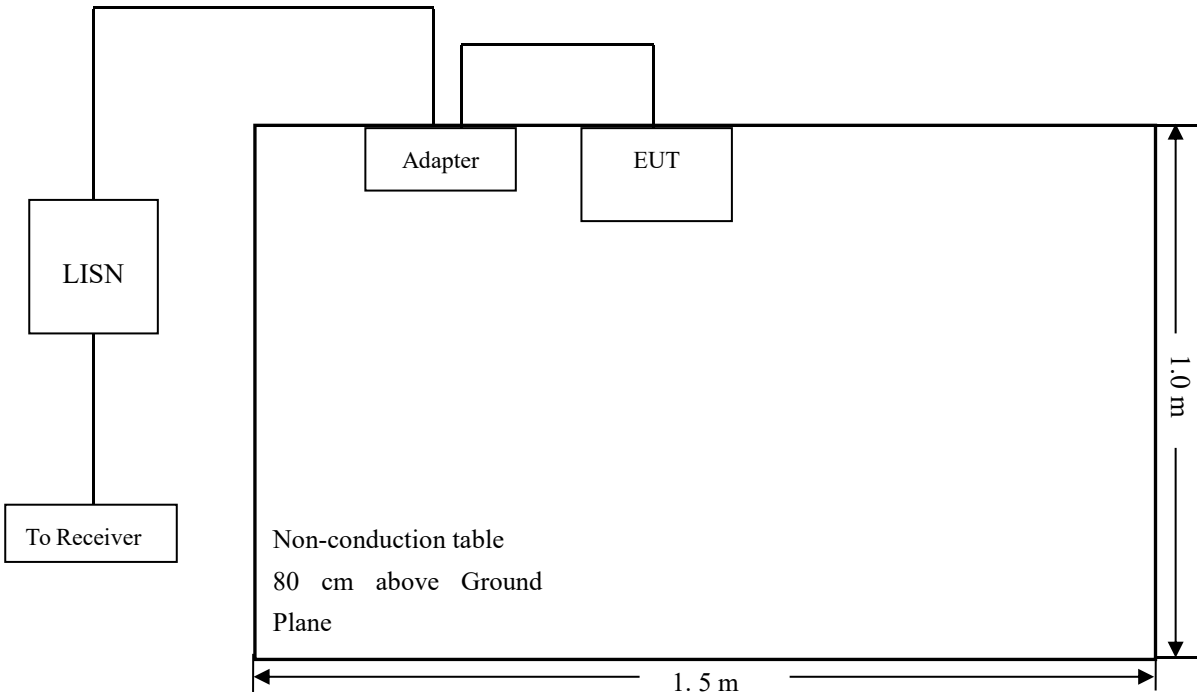
N/A: not applicable

3. Conducted Emissions

3.1 Test Procedure

Test is conducting under the description of ANSI C63.4-2014, American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the range of 9 kHz to 40 GHz.

3.2 Basic Test Setup Block Diagram



3.3 Environmental Conditions

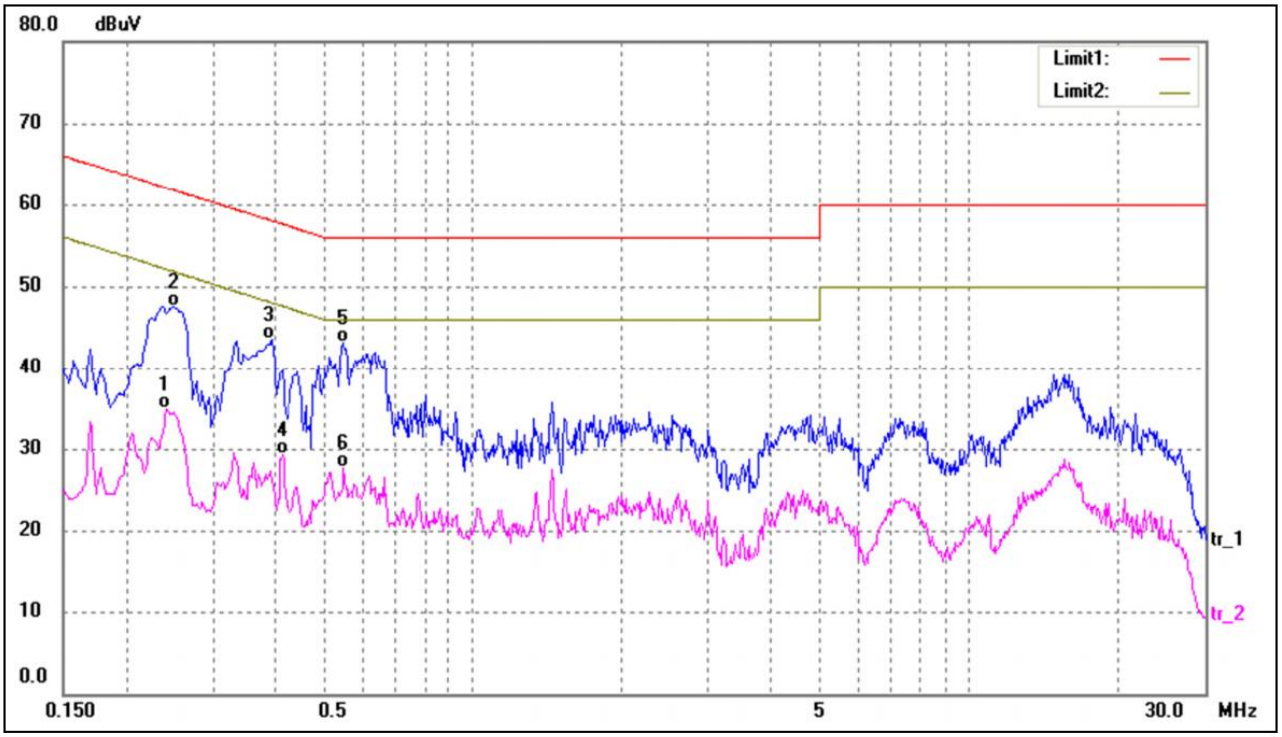
Temperature:	23 °C
Relative Humidity:	52%
ATM Pressure:	1011 mbar

3.4 Summary of Test Results/Plots

According to the data in section 3.6, the EUT complied with the FCC Part 15.107(a) Conducted margin for a Class B device.

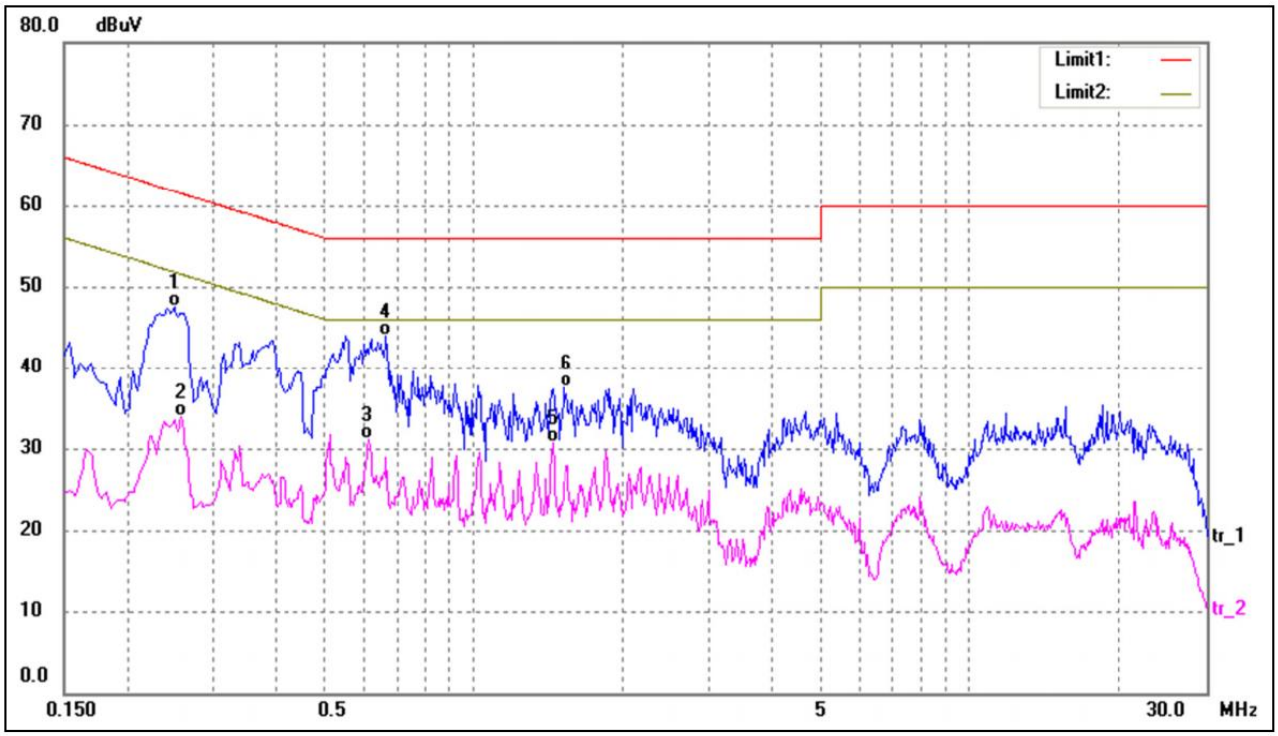
3.5 Conducted Emissions Test Data

Polarity:	Line



No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.2420	25.11	9.80	34.91	52.02	-17.11	AVG
2	0.2500	37.79	9.80	47.59	61.75	-14.16	QP
3	0.3940	33.63	9.80	43.43	57.98	-14.55	QP
4	0.4140	19.56	9.80	29.36	47.57	-18.21	AVG
5*	0.5500	33.32	9.80	43.12	56.00	-12.88	QP
6	0.5500	17.93	9.80	27.73	46.00	-18.27	AVG

Polarity:	Neutral

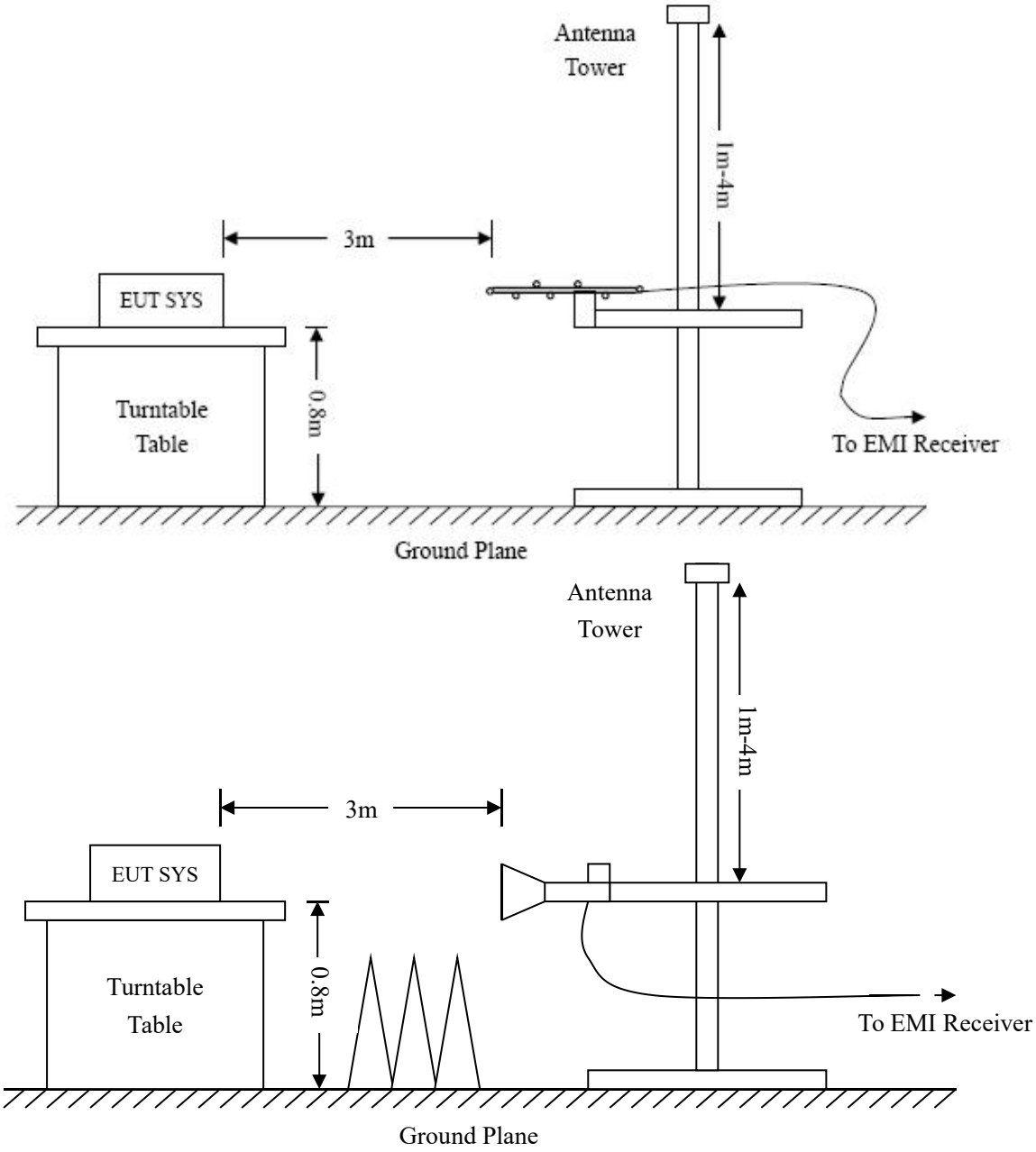


No.	Frequency	Reading	Correct	Result	Limit	Margin	Detector
	(MHz)	(dBuV)	(dB/m)	(dBuV)	(dBuV)	(dB)	
1	0.2500	37.64	9.80	47.44	61.76	-14.32	QP
2	0.2580	24.20	9.80	34.00	51.50	-17.50	AVG
3	0.6140	21.30	9.79	31.09	46.00	-14.91	AVG
4*	0.6660	34.07	9.79	43.86	56.00	-12.14	QP
5	1.4420	21.05	9.75	30.80	46.00	-15.20	AVG
6	1.5260	27.80	9.75	37.55	56.00	-18.45	QP

4. Radiated Emissions

4.1 Test Procedure

The setup of EUT is according with per ANSI C63.4-2014 measurement procedure. The specification used was with the FCC Part 15.109 Limit.
The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.
The spacing between the peripherals was 10 cm.



4.2 Test Receiver Setup

Frequency :9kHz-30MHz	Frequency :30MHz-1GHz	Frequency :Above 1GHz
RBW=10KHz,	RBW=120KHz,	RBW=1MHz,
VBW =30KHz	VBW=300KHz	VBW=3MHz(Peak), 10Hz(AV)
Sweep time= Auto	Sweep time= Auto	Sweep time= Auto
Trace = max hold	Trace = max hold	Trace = max hold
Detector function = peak	Detector function = peak, QP	Detector function = peak, AV

4.3 Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and the Cable Factor, and subtracting the Amplifier Gain from the Amplitude reading. The basic equation is as follows:

Result = Reading + Corr. Factor

The "**Margin**" column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -6dBμV means the emission is 6dBμV below the maximum limit for a Class B device. The equation for margin calculation is as follows:

Margin = Result – FCC Part 15.109(a) Limit

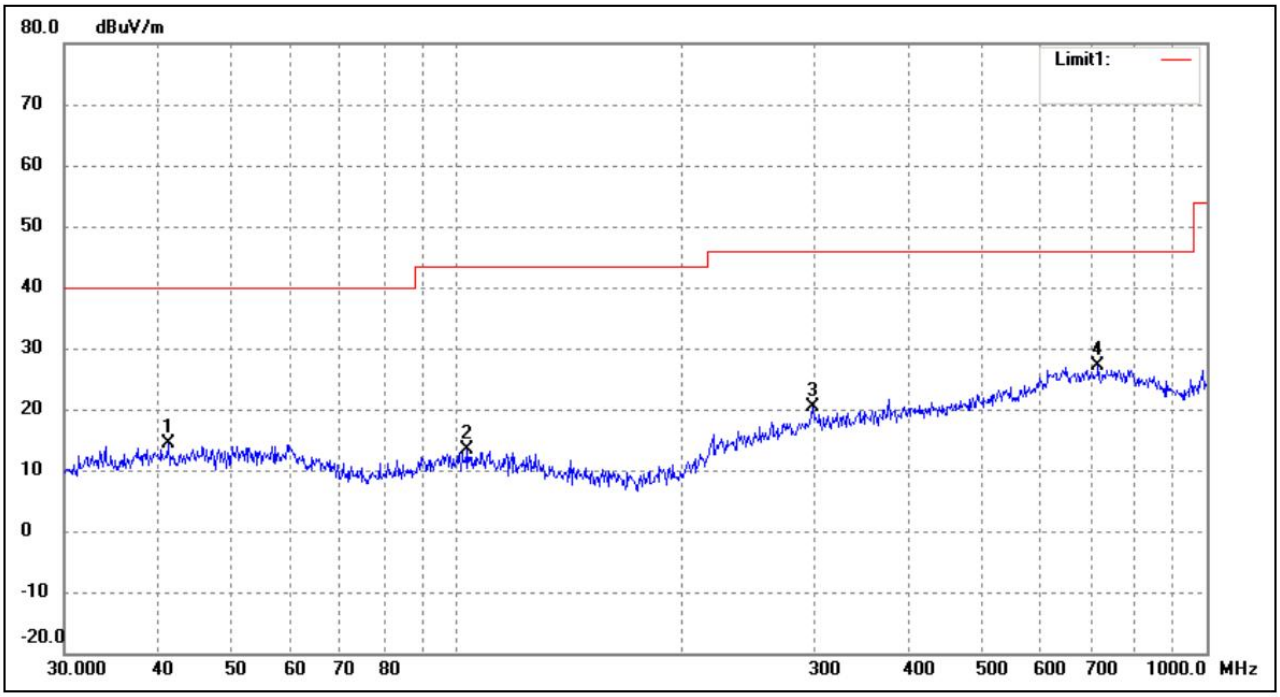
4.4 Environmental Conditions

Temperature:	23 °C
Relative Humidity:	55 %
ATM Pressure:	1011 mbar

4.5 Summary of Test Results/Plots

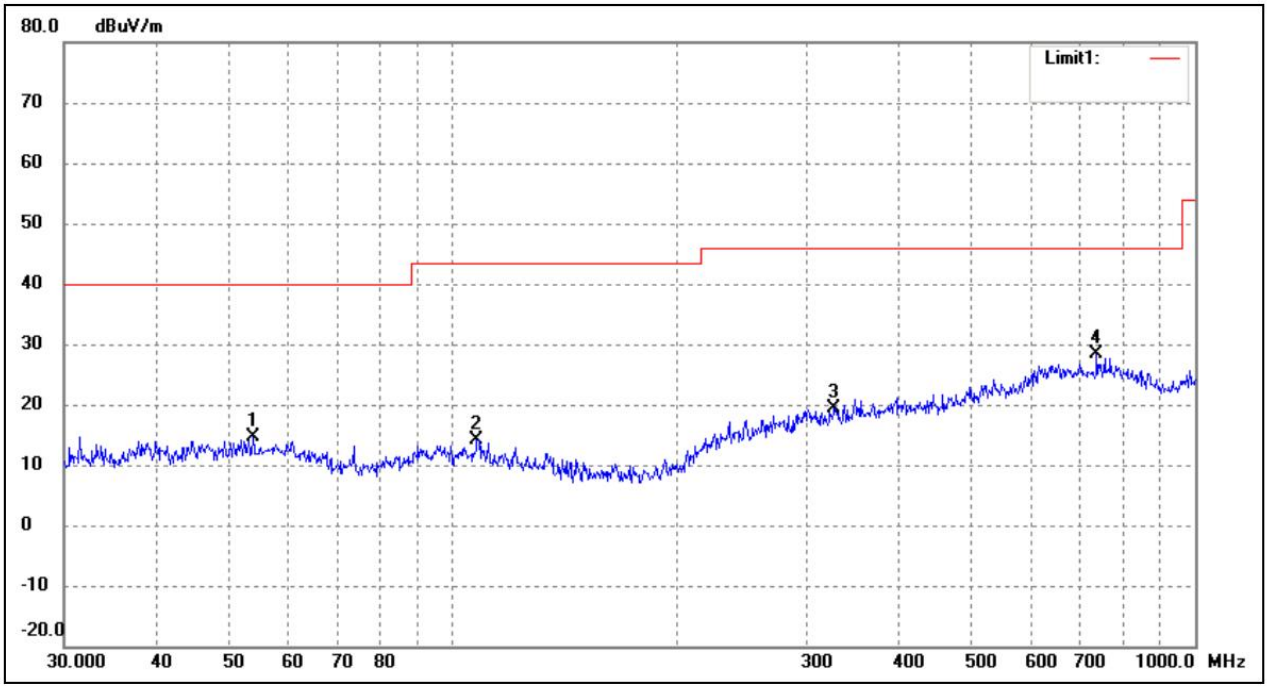
According to the data, the EUT complied with the FCC Part 15.109(a) rule.

Polarity:	Vertical



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	41.2765	30.83	-16.52	14.31	40.00	-25.69	163	100	peak
2	103.4421	29.97	-16.59	13.38	43.50	-30.12	161	100	peak
3	298.2681	29.91	-9.65	20.26	46.00	-25.74	58	100	peak
4	716.6820	28.26	-1.25	27.01	46.00	-18.99	97	100	peak

Polarity:	Horizontal



No.	Frequency	Reading	Correct	Result	Limit	Margin	Degree	Height	Remark
	(MHz)	(dBuV/m)	dB/m	(dBuV/m)	(dBuV/m)	(dB)	( )	(cm)	
1	53.8818	31.00	-16.49	14.51	40.00	-25.49	290	100	peak
2	107.8877	30.76	-16.61	14.15	43.50	-29.35	97	100	peak
3	326.7395	28.95	-9.47	19.48	46.00	-26.52	286	100	peak
4	737.0714	28.30	-0.02	28.28	46.00	-17.72	117	100	peak

Note: Testing is carried out with frequency rang 9kHz to the 12.75GHz, which above 1GHz are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.
The measurements greater than 20dB below the limit from 9kHz to 30MHz.

******* END OF REPORT *******